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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/922,263	09/02/1997	ROBERT J. CROWLEY	BSC011	1365
21323	7590	03/11/2005	EXAMINER	
TESTA, HURWITZ & THIBEAULT, LLP HIGH STREET TOWER 125 HIGH STREET BOSTON, MA 02110			SHAY, DAVID M	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 03/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 08/922,263	Applicant(s) CROWLEY, ROBERT J.	
	Examiner david shay	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on September 17, 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,5,7,9,15,17,26-30,32-44,47,48,52,53 and 60-63 is/are pending in the application.
- 4a) Of the above claim(s) 26-30,32-44,47,48,52 and 53 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,5,7,9,15,17 and 60-63 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 4, 5, 7, 9, 15, 60, and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker in combination with Deak. Tucker teaches a method such as claimed except for the use of sonoluminescent light. Deak teaches a laser wherein the output light is generated by sonoluminescence. It would have been obvious to the artisan of ordinary skill to employ the laser of Deak in the method of Tucker, since Tucker provides no particular details of the laser, and since the laser of Deak is simple, requiring few parts, or alternatively to employ the method of Tucker in the method of Deak, since this provides a medical application, and in either case to employ a filter, since this is a notorious device for reducing exposure to undesirable wavelengths, official notice of which has already been taken, thus producing a device such as claimed.

Claims 17 and 63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker in combination with Deak as applied to claims 1, 4, 5, 7, 9, 15, 60, and 62 above, and further in view of Putterman et al. Putterman et al teach that the generation of x-rays occurs during sonoluminescence and the use of lead zirconium titanate as a transducer material suitable for producing sonoluminescence. It would have been obvious to the artisan of ordinary skill to employ the transducers of Putterman et al, since these are capable of producing sonoluminescence and Deak teaches no particular transducer material, thus producing a device such as claimed.

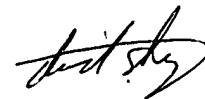
Claim 61 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tucker in combination with Deak as applied to claims 1, 4, 5, 7, 9, 15, 60, and 62 above, and further in view of Chapelon et al ('071). Chapelon et al ('071) teaches the equivalence of shaped

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transducers and flat transducers with a lens for focusing ultrasonic radiation. It would have been obvious to the artisan of ordinary skill to employ a flat transducer with a lens in the device of Deak, since these are equivalents as taught by Chapelon et al ('071) thus producing a device such as claimed.

Applicant's arguments with respect to claims 1, 4, 5, 7, 9, 15, and 60-63 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication should be directed to David Shay at telephone number (571) 272-4773.

A handwritten signature in black ink, appearing to read "David Shay", is located to the right of the contact information.